

JANUARY 2005 04·01·05

PA 1247027

THE UNITED STATES OF AMERICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

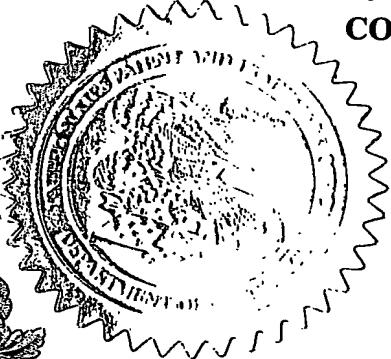
December 02, 2004

THIS IS TO CERTIFY THAT ANNEXED HERETO IS A TRUE COPY FROM
THE RECORDS OF THE UNITED STATES PATENT AND TRADEMARK
OFFICE OF THOSE PAPERS OF THE BELOW IDENTIFIED PATENT
APPLICATION THAT MET THE REQUIREMENTS TO BE GRANTED A
FILING DATE UNDER 35 USC 111.

APPLICATION NUMBER: 60/517,032

FILING DATE: November 04, 2003

By Authority of the
COMMISSIONER OF PATENTS AND TRADEMARKS




M. K. HAWKINS
Certifying Officer

BEST AVAILABLE COPY

16076 U.S. PTO

Please type a plus sign (+) inside this box →

PTO/SB/16 (5-03)

Approved for use through 04/30/2003. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

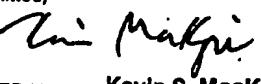
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PROVISIONAL APPLICATION FOR PATENT COVER SHEET

This is a request for filing a PROVISIONAL APPLICATION FOR PATENT under 37 CFR 1.53(c).

INVENTOR(S)		
Given Name (first and middle [if any])	Family Name or Surname	Residence (City and either State or Foreign Country)
Robert B.	Mooney	Farmington Hills, MI
<input type="checkbox"/> Additional inventors are being named on the _____ separately numbered sheets attached hereto		
TITLE OF THE INVENTION (280 characters max)		
PANORAMIC RETRACTABLE TOP		
Direct all correspondence to:		
<input checked="" type="checkbox"/> Customer Number 28886 → <input type="checkbox"/> Place Customer Number Bar Code Label here		
OR <input type="checkbox"/> Type Customer Number here		
<input checked="" type="checkbox"/> Firm or Individual Name Kevin S. MacKenzie		
<input type="checkbox"/> Address Clark Hill PLC		
<input type="checkbox"/> Address 500 Woodward Avenue, Suite 3500		
City	Detroit	State MI
Country	US	Telephone 313-965-8300
Fax	313-965-8252	
ENCLOSED APPLICATION PARTS (check all that apply)		
<input checked="" type="checkbox"/> Specification Number of Pages 3		<input type="checkbox"/> CD(s), Number
<input checked="" type="checkbox"/> Drawing(s) Number of Sheets 10		<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Application Data Sheet. See 37 CFR 1.76		
METHOD OF PAYMENT OF FILING FEES FOR THIS PROVISIONAL APPLICATION FOR PATENT (check one)		
<input type="checkbox"/> A check or money order is enclosed to cover the filing fees		FILING FEE AMOUNT (\$) 50-1759 \$160.00
<input checked="" type="checkbox"/> The Director is hereby authorized to charge filing fees or credit any overpayment to Deposit Account Number 50-1759		
<input type="checkbox"/> Payment by credit card. Form PTO-2038 is attached.		
The invention was made by an agency of the United States Government or under a contract with an agency of the United States Government.		
<input checked="" type="checkbox"/> No.		
<input type="checkbox"/> Yes, the name of the U.S. Government agency and the Government contract number are: _____		

Respectfully submitted,

SIGNATURE TYPED or PRINTED NAME **Kevin S. MacKenzie**TELEPHONE **313-965-8300**Date **11/04/2003**

REGISTRATION NO.

(if appropriate)

45,639

Docket Number:

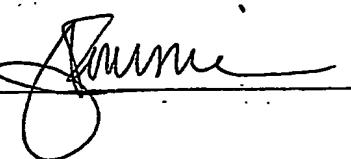
19339-095692**USE ONLY FOR FILING A PROVISIONAL APPLICATION FOR PATENT**

This collection of information is required by 37 CFR 1.51. The information is used by the public to file (and by the PTO to process) a provisional application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 8 hours to complete, including gathering, preparing, and submitting the complete provisional application to the PTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop Provisional Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

CERTIFICATE OF MAILING BY EXPRESS MAIL

EXPRESS MAIL MAILING LABEL NO. EL 962720863 US

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on November 3, 2003, 2003 and is addressed to: Mail Stop Provisional, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450

By: 

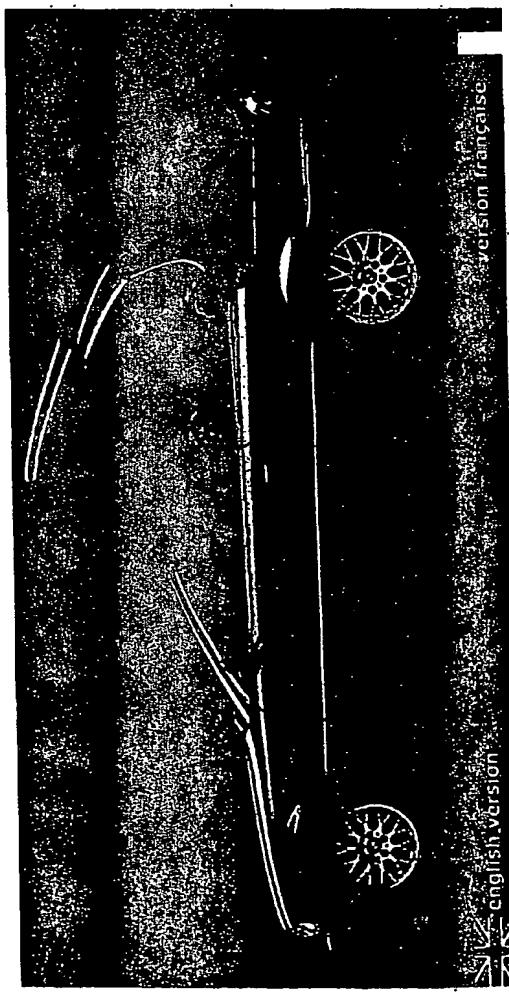
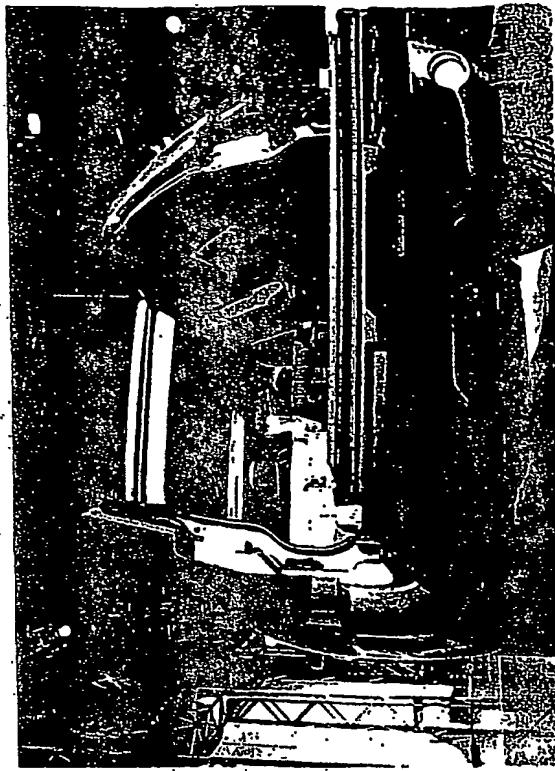
Attorney Docket No : 19339-095692

INVENTOR

Panoramic Retractable Top
for Legal Office
10/27/03

Shaping the inner dimension

- First to market with Sunroof function AND full open air retraction for Sedan (4 door) vehicles
- Minimal panel packaging / storage size into trunk during and after retraction due to unique kinematics
- All glass modular roof
 - Laminated glass for reduced NVH
 - Glass laminations to provide variable optic effects
- Full size back seat
 - No infringement into rear seating
- Decklid opening not required during panel kinematics
- Security of a hard top, with sunroof & full open air options
- Motor and actuator driven system
- Maintains base car performance requirements
- Torsional; Roof crush; Side impact; Head impact, etc.



Sliding Roof

Retractable

INTER

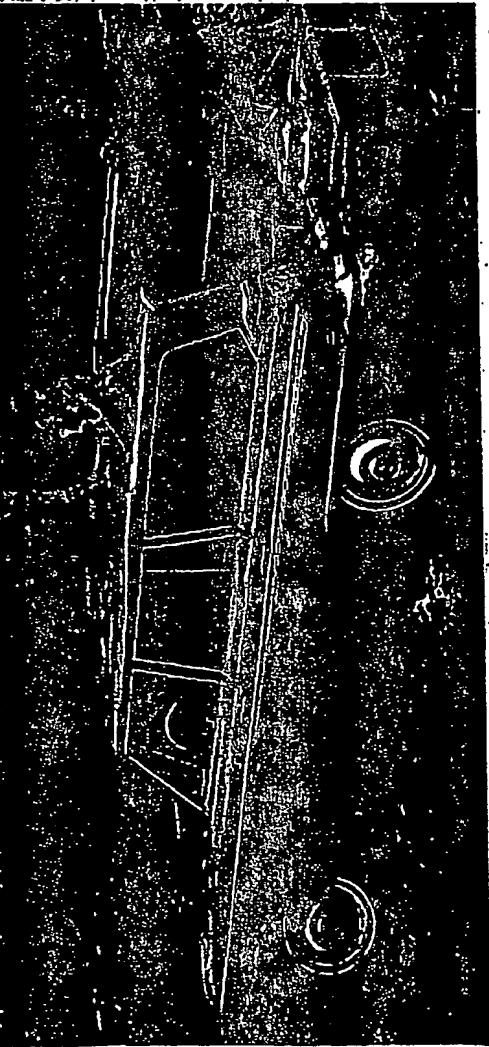
Spec. No. 64: Standardized Station Wagons

the Lark Station Wagon for 1962. It was now called

Wagonaire and featured a removable sliding roof above the cargo compartment. This enhanced practicality and Studebaker advertised it as "a family car, a functional utility wagon and a fun-filled

convertible. The tailgate was

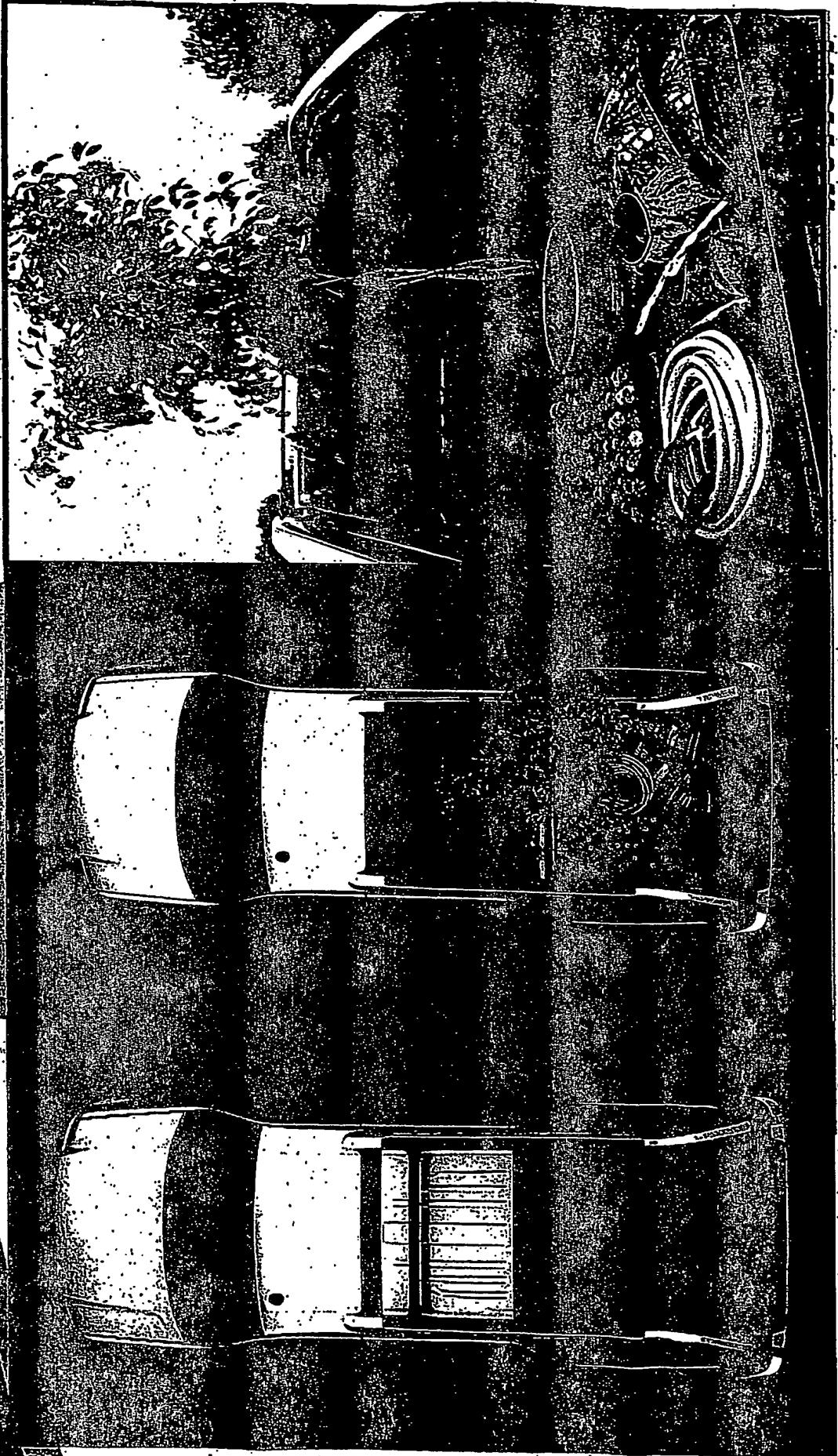
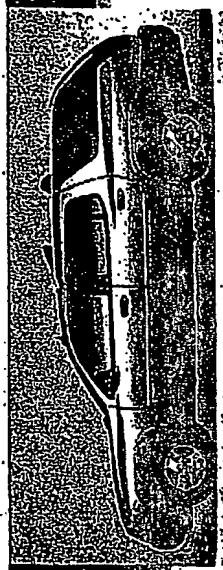
hydraulically assisted and the front door had a built-in window.



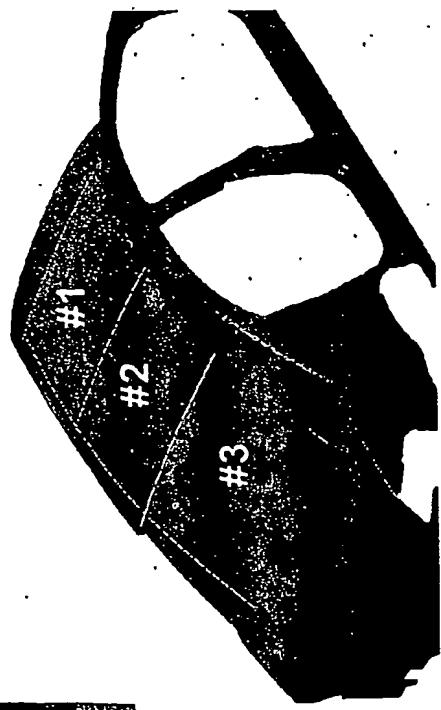
"What was old is new again"

INTICEN

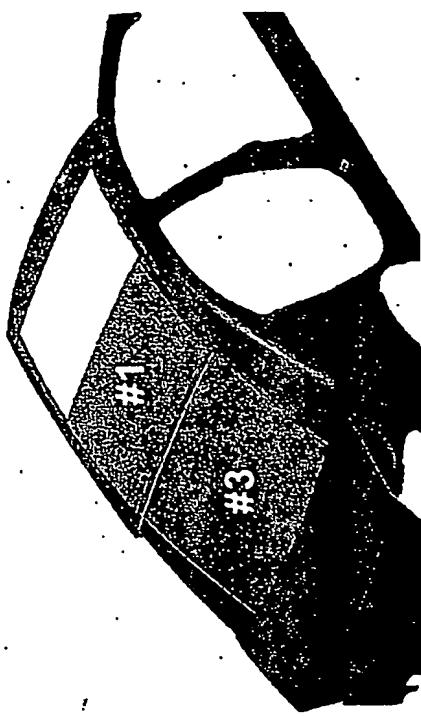
2004 GMC Envoy XUV



Intier panel movement stages



1) All panels closed

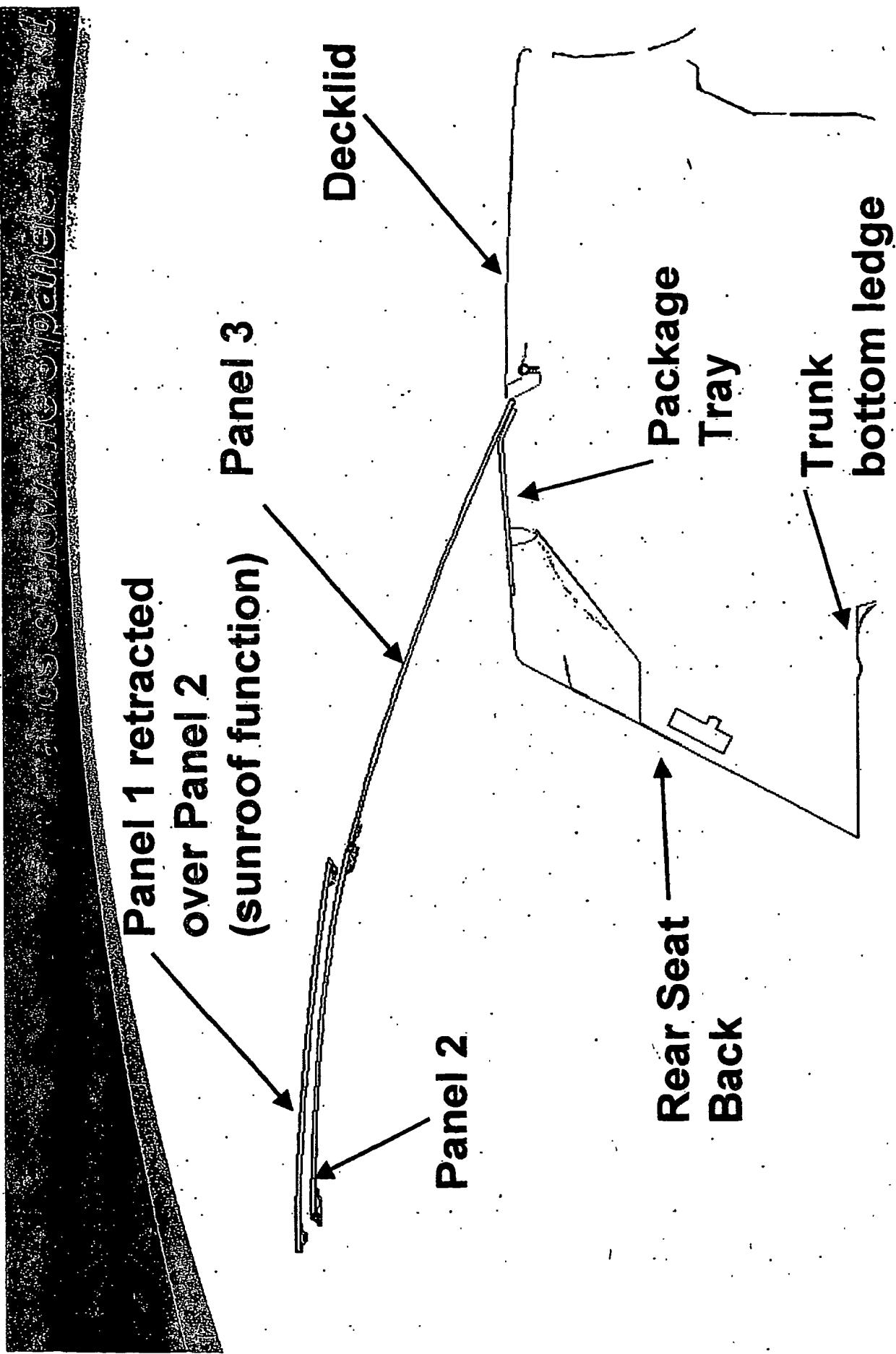


2) Sunroof function - #1 slides over #2



3) #3 unlocks and rotates out
and then #1 & 2 slide under #3

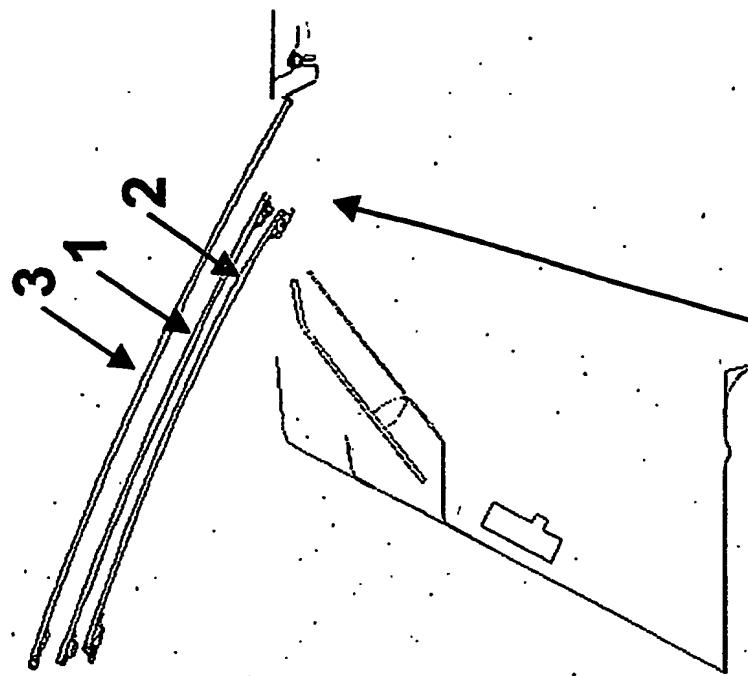
4) Package tray swings up and
then #1 & 2 & 3 all rotate into trunk *INTICE-R*
and package tray returns



Centerline Section

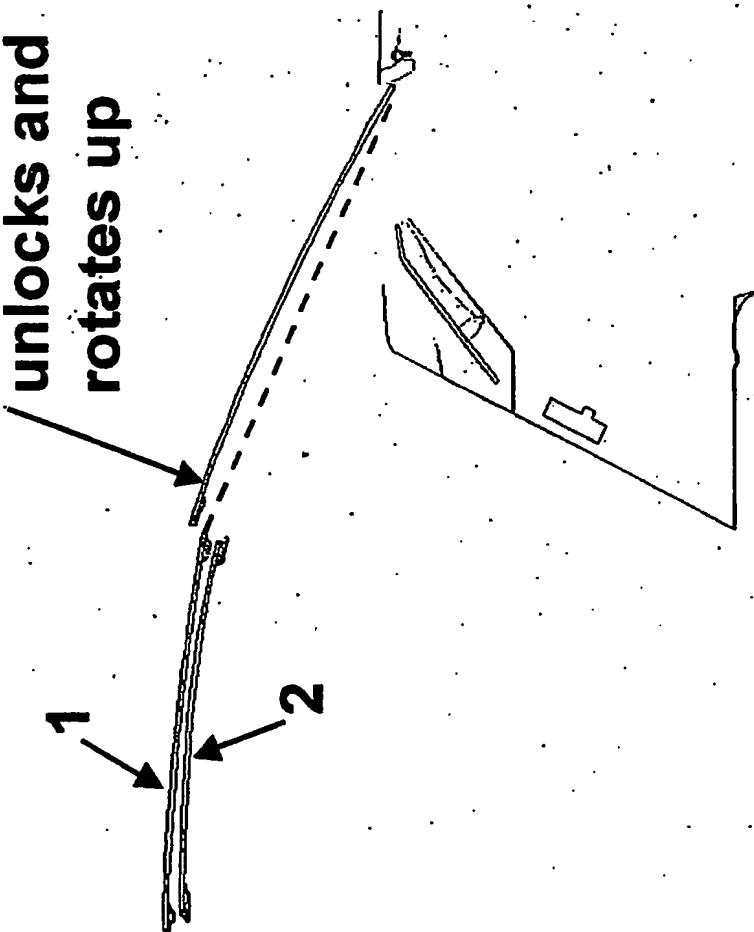
INT163

**Panels 1&2
slide under
Panel 3**

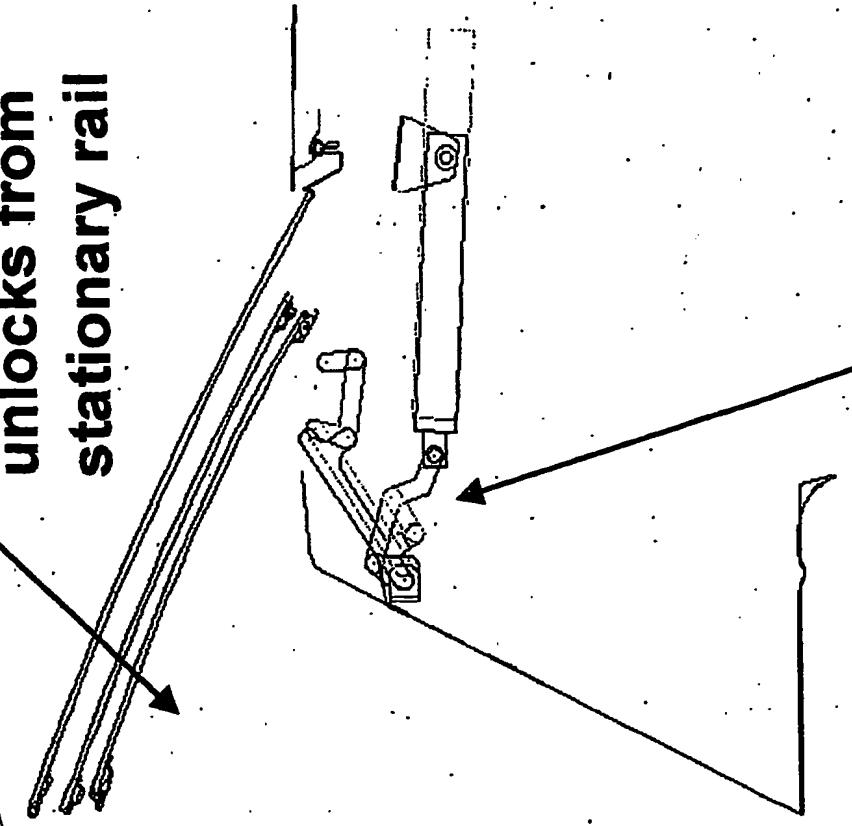


INTIGR
**Package tray
rotates down**

**Panel 3
unlocks and
rotates up**



Rear rail
unlocks from
stationary rail

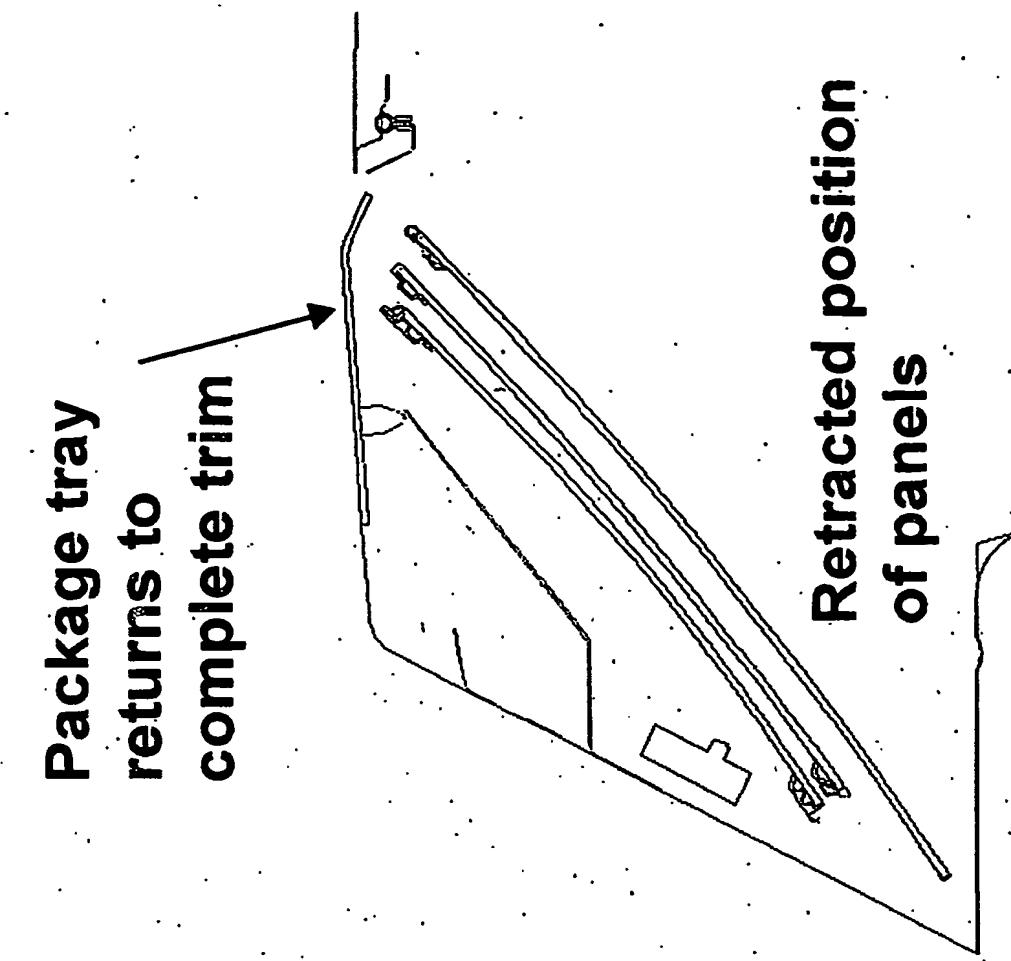


Top retractable
mechanism system

3 panels rotate
together

INTICER

Package tray returns to complete trim



Retracted position of panels

Retractable mechanism
rotate panels with very
limited intrusion into trunk

Retractable Hard Top Systems

No integrated sunroof function

Decklid kinematics required

Limited or no trunk space

Limited or no back seating

Coupes only
Hydraulically driven *INTIER*

Double click on car for top kinematics



Panel 1 interface
Panel 2

Panel 1

Panel 1
glass reinf

Panel 2

Seal

Fixed close
out panel

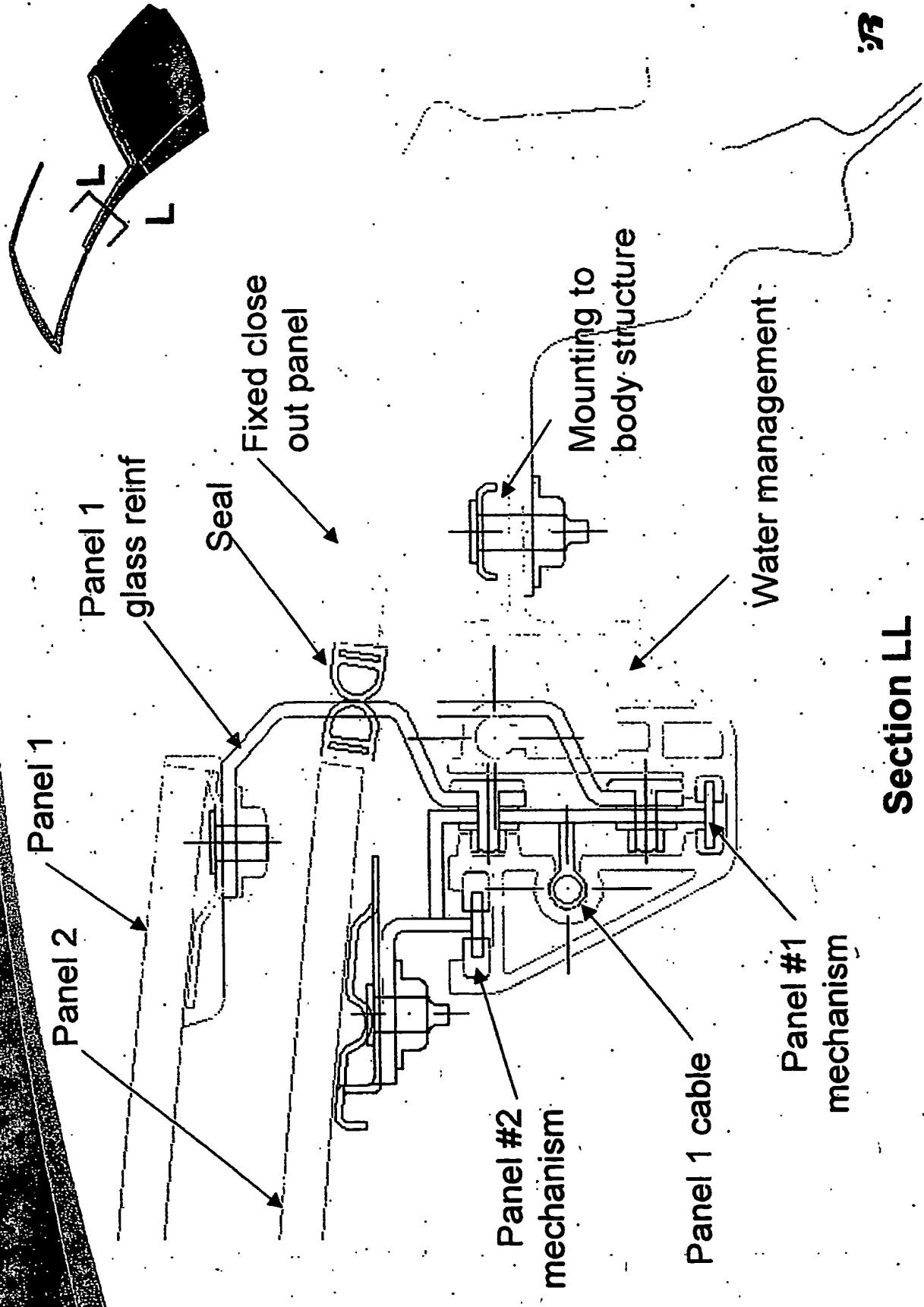
Mounting to
body structure

Water management

Panel #1
mechanism

Panel 1 cable

Section LL



Document made available under the Patent Cooperation Treaty (PCT)

International application number: PCT/CA04/001919

International filing date: 04 November 2004 (04.11.2004)

Document type: Certified copy of priority document

Document details: Country/Office: US
Number: 60/517,032
Filing date: 04 November 2003 (04.11.2003)

Date of receipt at the International Bureau: 23 February 2005 (23.02.2005)

Remark: Priority document submitted or transmitted to the International Bureau in compliance with Rule 17.1(a) or (b)



World Intellectual Property Organization (WIPO) - Geneva, Switzerland
Organisation Mondiale de la Propriété Intellectuelle (OMPI) - Genève, Suisse

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- BLACK BORDERS**
- IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- FADED TEXT OR DRAWING**
- BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- SKEWED/SLANTED IMAGES**
- COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- GRAY SCALE DOCUMENTS**
- LINES OR MARKS ON ORIGINAL DOCUMENT**
- REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.